

Application No. 10/576946
Response to the Office Action dated November 10, 2008

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for producing a nitridosilicate-based compound, comprising reacting
a material containing an alkaline-earth metal compound capable of generating an alkaline-earth metal oxide MO by heating, where M is at least one element selected from Mg, Ca, Sr, and Ba; and O is oxygen,
a silicon compound, and
carbon
in an atmosphere of nitriding gas,
wherein the nitridosilicate-based compound is not in a SIALON-type structure compound represented by a general formula: $M_{p/2}Si_{12-p-q}Al_{p+q}O_qN_{16-q}$ (where M is Ca or Ca combined with Sr; q is 0 to 2.5; and p is 1.5 to 3), and
the reaction is performed by heating.
2. (Original) The method for producing a nitridosilicate-based compound according to claim 1, wherein the alkaline-earth metal compound is at least one compound selected from a carbonate, an oxalate, an oxide, and a hydride of alkaline-earth metal.
- 3 - 5. (Cancelled)
6. (Previously Presented) The method for producing a nitridosilicate-based compound according to claim 1, wherein the silicon compound is at least one compound selected from silicon nitride and silicon diimide.

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7. (Previously Presented) The method for producing a nitridosilicate-based compound according to claim 1, wherein the nitriding gas is at least one gas selected from nitrogen gas and ammonia gas.
8. (Cancelled)
9. (Previously Presented) The method for producing a nitridosilicate-based compound according to claim 1, wherein the carbon is solid-state carbon.
10. (Currently Amended) ~~[[A]]~~The method for producing a nitridosilicate-based compound according to claim 1, wherein a nitridosilicate-based compound is produced in which the number of atoms of oxygen is smaller than that of alkaline-earth metal per mol of nitridosilicate-based compound.
11. (Cancelled)
12. (Previously Presented) The method for producing a nitridosilicate-based compound according to claim 1, wherein a compound represented by a general formula: $M_2Si_5N_8$, where M is at least one element selected from Mg, Ca, Sr, and Ba, is produced.
13. (Previously Presented) The method for producing a nitridosilicate-based compound according to claim 1, wherein the nitridosilicate-based compound is a nitridosilicate-based phosphor.
14. (Original) The method for producing a nitridosilicate-based compound according to claim 13, wherein the nitridosilicate-based phosphor is represented by a general formula selected from $M_2Si_5N_8:Eu^{2+}$, $M_2Si_4AlON_7:Eu^{2+}$, $MSiN_2:Eu^{2+}$, and $M_2Si_5N_8:Ce^{3+}$, where M is at least one element selected from Mg, Ca, Sr, and Ba.

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15. (Original) The method for producing a nitridosilicate-based compound according to claim 13, wherein the nitriding gas is mixed gas of nitrogen and hydrogen.

16. (Original) A nitridosilicate phosphor comprising a nitridosilicate compound represented by a general formula: MSiN_2 as a phosphor base material, and Eu^{2+} ions as a luminescent center,

wherein a main component of the M is Ba.

17. (Original) A light-emitting apparatus using, as a light-emitting source, a nitridosilicate phosphor comprising a nitridosilicate compound represented by a general formula: MSiN_2 as a phosphor base material, and Eu^{2+} ions as a luminescent center,

wherein a main component of the M is Ba.

18 - 28. (Cancelled)

29. (Currently Amended) The method for producing a nitridosilicate-based compound according to claim [[5]], wherein the nitridosilicate-based compound is a nitridosilicate-based phosphor.

30. (Previously Presented) A method for producing a nitridosilicate-based compound, comprising reacting

a material containing a rare earth compound capable of generating a rare earth oxide LnO or Ln_2O_3 by heating, where Ln is at least one element selected from rare earth elements of atomic numbers 21, 39, and 57-71; and O is oxygen,

a silicon compound, wherein the silicon compound is at least one compound selected from silicon nitride and silicon diimide, and

carbon

in an atmosphere of nitriding gas.